

Notice of Allowability

Application No.

10/606,668

Examiner

Eric F. Winakur

Applicant(s)

HANNULA ET AL.

Art Unit

3735

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE and amendment filed 21 November 2005.
2. ☒ The allowed claim(s) is/are 18-24,26,37,38 and 42-44.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

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An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jila Bakker on 29 December 2005.

The application has been amended as follows:

Claims 25 (inconsistent with the amendment to claim 18 below), 27 - 36 (previously withdrawn), and 41 (canceled in favor of amended claim 44 below) have been cancelled.

Claim 18 has been amended as follows:

18. A pulse oximetry sensor comprising:

a [headcovering] stocking cap;

a substrate disposed on the [headcovering] stocking cap;

an emitter disposed on the substrate;

a detector disposed on the substrate; and

a cable disposed on the substrate, wherein the cable extends from the substrate at an angle not in-line with an imaginary axis extending through the emitter and the detector, and wherein the cable extends through an open portion of the stocking cap configured to be proximate to a top of the stocking cap when the stocking cap is applied to the patient.

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Claim 24 has been amended as follows:

24. The sensor of claim 18, wherein the [headcovering] stocking cap comprises a neonatal stocking cap.

Claim 37 has been amended as follows:

37. A headcovering comprising:

a neonatal stocking cap; and

a pulse oximetry sensor, wherein the pulse oximetry sensor comprises:

a substrate;

an emitter disposed on [a] the substrate;

a detector disposed on the substrate; and

a cable disposed on the substrate, wherein the cable [is adapted to extend] extends from the substrate through an open portion of the neonatal stocking cap [that corresponds to] configured to be proximate to a top of [a patient's head] the neonatal stocking cap when the neonatal stocking cap is applied to the patient.

Claim 44 was amended as follows:

44. The sensor of claim 37, wherein the cable is secured by [tying] a portion of the neonatal stocking cap [around the cable].

1. The following is an examiner's statement of reasons for allowance: As Applicant notes in the remarks filed 21 November 2005, none of the prior art, including Rafert et al., DeLonzor, or Toomim et al., teaches or suggests a stocking cap with an opening

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through which a sensor cable may extend (as in claim 37). Examiner considered Applicant's amendments and remarks regarding claim 18, but was not persuaded that Toomim et al. was overcome with regard to at least claim 18, as the description of Figure 3 of Toomim et al. per MPEP 2125 indicates that the disclosure of Toomim et al. was sufficient to meet amended claim 18. Further, Elliott teaches an obstetric bonnet that is used with a fetus for assisting childbirth by allowing a medical practitioner to apply frictional and vacuum forces to the fetal head to pull the fetus and may include a sensor that passes through a top portion of the bonnet (Figure 16), but does not teach or suggest an arrangement of a neonatal stocking cap having the claimed structure of an open portion and a sensor. Applicant agreed to incorporate the limitation regarding the open portion into claim 18, as amended above, and to amend claim 37 to clarify the relationship between the open portion and the stocking cap. Claim 44 was amended to avoid product by process language in the claim and to more positively recite the limitation.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric F. Winakur whose telephone number is 571/272-4736. The examiner can normally be reached on M-Th, 7:30-5; alternate Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ali Imam can be reached on 571/272-4737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eric F Winakur
Primary Examiner
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4 January 2006